

## OTHER NOTICES

**Dubinin, N. P.** (Trs. G. H. Beale). *Problems of Radiation Genetics*. Edinburgh, 1964. Oliver and Boyd. Pp. ix+445. Price 110s.

IT IS OF GREAT INTEREST to have available a translation of a book by N. P. Dubinin on radiation genetics, and very encouraging to know that so much work based on classical genetics is now again being carried out in USSR. The approach to the subject and the coverage is conventional and would appear to owe much to the reports of 1958 and 1962 of the United Nations Scientific Committee on the Effects of Atomic Radiation.

The book makes interesting and valuable reading for someone familiar with the subject, because on many issues the outlook and the emphasis are different from those in "Western" literature, and many Russian papers not readily accessible in translation are cited. However, it should be read with caution by those not so familiar with the subject because there are a very large number of misquotations or misinterpretations of standard sources, and many omissions of key references. The writing is in places very untidy and misleading; as for example, in comparing findings from experiments involving radiation exposure of different germ cell stages when this difference is crucial to the argument. Such readers should check carefully the references cited before accepting interpretations in the book. There was a need for a book of this type, covering in some depth a wide range of experimental evidence as a "medium weight" textbook on the subject, and it is therefore a great pity that the text cannot be relied upon in so many respects.

A. C. S.

**Gluckman, Max.** (Editor). *Closed Systems and Open Minds: The Limits of Naïvety in Social Anthropology*. Edinburgh, 1964. Oliver and Boyd. Pp. xii+274. Price 42s.

THE BOOK CONSISTS of five regional studies, ranging from Ndembu ritual (of Northern

Rhodesia) to social mobility and social class in industrial communities (as exemplified in Britain). There is a long concluding section which welds together and expands upon previous contributions. Two issues of special importance are: what basic assumptions are implied by social anthropologists in their field work, and by what criteria do social anthropologists limit their field of study? The work is of some general interest, and no doubt will promote much discussion between those having a more specialist interest in this science.

D. R. B.

**Meggitt, M. J.** *The Lineage System of the Mae-Enga of New Guinea*. Edinburgh, 1965. Oliver and Boyd. Pp. xiii+297. Price 70s.

ALTHOUGH THE INTERESTS of the social anthropologist do overlap those of the human biologist, they all too frequently express little interest in one another's work. This important monograph on the Mae-Enga people of New Guinea demonstrates how social research can also provide useful information for those interested in the more biological, and especially demographic, aspects of primitive societies. Dr. Meggitt writes well and concisely, and much of the data is provided in numerous tables (92 in all). At a somewhat "exotic" level, those interested in finger amputation in prehistoric communities will find valuable comparative data in this study.

D. R. B.

**Phillips, Edwin A.** *Field Ecology*. American Institute of Biological Studies; Biological Sciences Curriculum Study. London, 1965. Heath/Harrap. Pp. xii+100. Price 12s. 6d.

THE AMERICAN INSTITUTE OF BIOLOGICAL SCIENCES has commissioned a series of paperbacks, each of which provides for the experimental investigation in depth of a specific biological topic. Along with books and pamphlets they are part of the great re-organisation

of biological teaching in high schools. This book is the "laboratory block" on field studies.

It is intended for a group of high school students who have six weeks in order to study the ecology of a plot of land. There are directions for the study of environmental factors, for the mapping and listing of organisms, for the study of physiological ecology and for the description of succession of forms. Experimental procedures are outlined and lines for classwork suggested. The accuracy of techniques seemed to vary considerably and one technique seemed very doubtful. It was assumed that few species would be identified.

There were many good ideas in this book but they appeared to lack the refinement of testing in the educational situation.

K. W. WILKES

**Reed, Sheldon C.** *Parenthood and Heredity*. New York, 1964. Wiley. Pp. x+278. Price 14s. Paperback.

*Counseling in Medical Genetics* was first published in 1956 and a considerably revised edition appeared in 1963; both were fully reviewed in these pages.\*

Now John Wiley and Sons, in their Science Editions Series, have reprinted the second edition, under another title, *Parenthood and Heredity*. This new title will indicate to the layman that the book is for him, and he will find in it a good deal of basic information on the more usual conditions for which genetic counselling might be sought—"genetic traits appearing in one or more individuals out of about every 1000 born". Many of the chapters include "illustrative examples" of the question and answer type.

An appendix gives some twenty pages of rare hereditary conditions with references to further reading for each one; there is a long list of literature cited, and a good index.

K. H.

**Weiser, Eric.** (Trs. Therese Pol.) *Pregnancy: Conception and Heredity*. First English edition. New York, 1965. Blaisdell. Pp. 148. Price \$1.50. Paperback.

\* W. B. Saunders. See THE EUGENICS REVIEW, 48, 228; 55, 242.

THE AUTHOR, NOW a French citizen but born in Germany, is a scientific journalist. His book covers conception, sex determination, simple genetics, congenital malformations, virgin birth and specially gifted children. It is simply and attractively written and, on the whole, accurate. The one or two nonsensical sentences, for example one stating that in a large sample of normal children 10 per cent were "above average" in intelligence, are presumably mis-translations.

C. O. C.

**Wilkie, D.** *The Cytoplasm in Heredity*. London, 1964. Methuen. (New York, Wiley). Methuen's Monographs on Biological Subjects. Pp. 115. Price 16s.

THE THEORY THAT DNA (desoxyribose nucleic acid) within the chromosomes constitutes the vehicle of genetic information passed from one generation to another is central to modern biology. This book asks and partly answers some of the questions following from that theory, such as the role of cytoplasm in inheritance, whether the information codes are confined to the chromosome DNA and the nature of the interaction between nucleus and cytoplasm, a question that has occupied thoughtful biologists for nearly a century.

There is no doubt that genetic units exist in mitochondria, plastids and centrioles as they show genetic continuity and possess DNA. But inheritance does not depend on DNA alone for a new cell will have a portion, sometimes nearly all, of the parent cytoplasm, and removal of the nucleus from some simple uninuclear organisms does not lead to immediate death or even disorganization. Within higher organisms an outline of nucleus-cytoplasm interaction is seen as qualitative information controlled by genetic systems with quantitative effects controlled by cytoplasmic mechanisms. There are several suggestions about new work to throw light on present problems.

This is an easily understood and clearly written account of the new approaches to the central subject of biology.

K. W. WILKES